Certification of Levee Systems for the National Flood Insurance Program

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Purpose of EC 1110-2-6067

Clarify for USACE field offices the guidance that is currently adequate and should be followed, guidance that is outdated wherein other/newer concepts need to be considered and where such material may be located, and to provide definitive guidance on process and documentation for certification of levee systems.

Levee Certification Topics

- Certification Process
- Systems Approach
- No Partial Certifications
- Validity Period
- Technical Criteria
- Documentation

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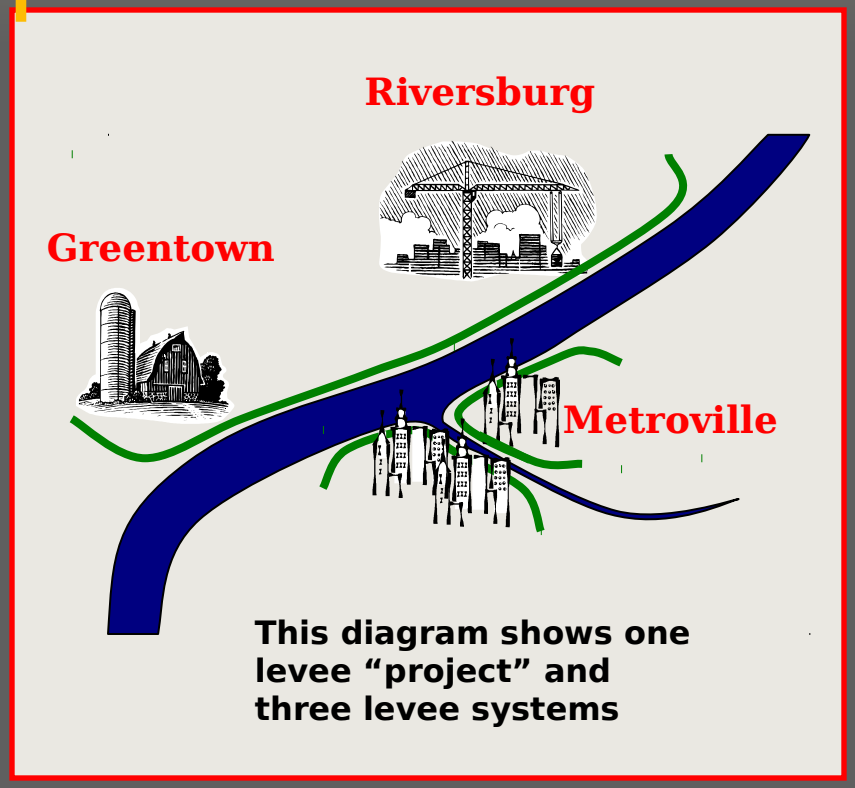
Levee System

- A levee system is inclusive of all components that are interconnected and necessary to insure protection of the associated floodplain – levee/floodwall sections, closure structures, pumping stations, culverts, interior drainage works, and system operation and maintenance



Systems Approach

- Focus is upon the levee system that is associated with a given separable floodplain.
- Levee and floodwall sections, closure structures, pumping stations, culverts, interior drainage works, and system operation and maintenance
- No **PARTIAL** certifications

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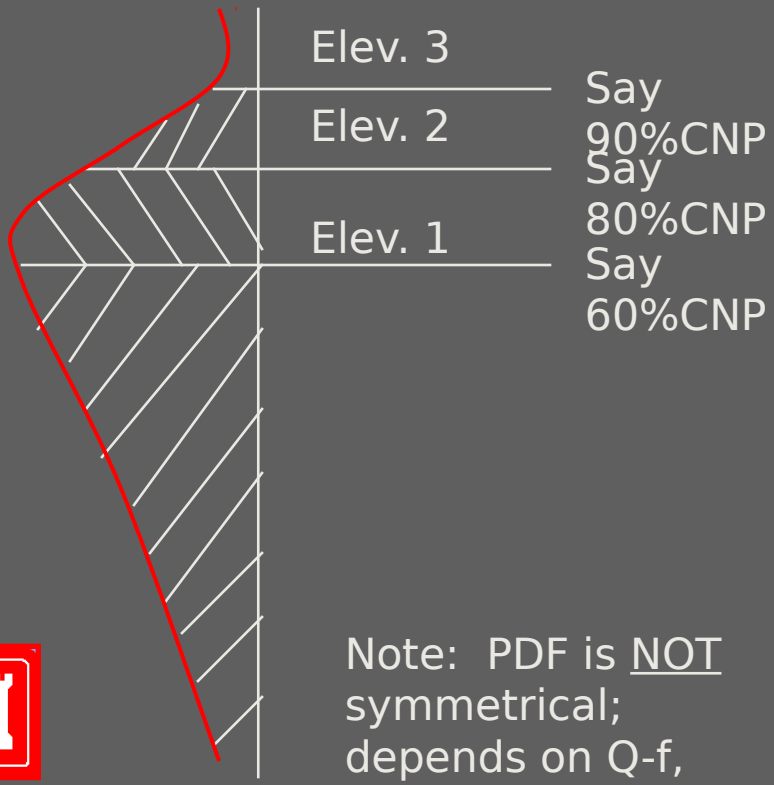
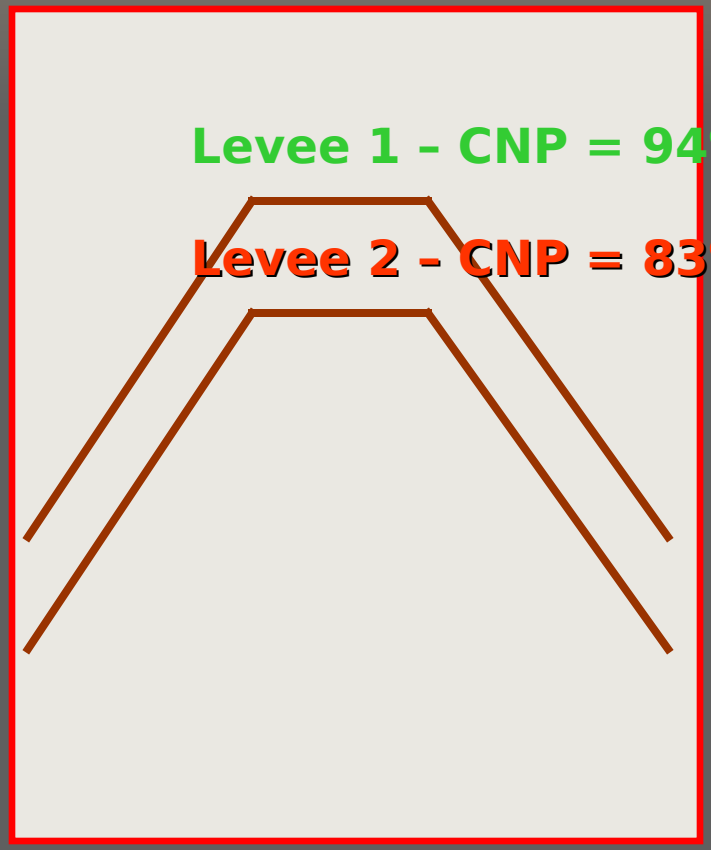
CNP Concepts

Elevation PDF for base flood event; e.g. 0.01 exceedance event.



Note: PDF is NOT symmetrical; depends on Q-f, rating curve, & failure prob. Curve.



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ISSUES TO BE RESOLVED

- Existing Certifications
- Funding Mechanisms
- Liability
- Dual Criteria

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AR (estoration) Zone

- Built with federal funds
- No longer provides protection against base flood
- Provides, at a minimum, protection from 3% flood
- Requires federal certification only
- Natomas did not meet
- New Orleans under study

AR Zone

- Limits construction
- Mandatory flood insurance

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Incised Channels

- FEMA does not require freeboard but requires certification of all analyses and data that supports providing PROTECTION from the base flood.
- USACE requires 90% assurance of containing the base flood to certify USACE designed and constructed channels.

EC Implications

- Clarifies criteria which to some equates to “higher standard” and higher costs
- Clarified criteria could lead to more non or de-certifications due to previous lax application
- Could have huge mapping and insurance impacts

EC Implications

- Levee Systems that have been "de-certified
  - St Louis Area
  - Natomas Area near Sacramento
  - Green River near Seattle

EC Schedule

- Draft EC to Principals Review Team (PRT) - 6 April 07
- Draft EC to Field for Use and Review - 17 Sept 07
- End of Field Review Period - 31 Oct 07
- Draft EC to ITR - 1 June 07
- Final Release to Field - 1 August 08*

* highly dependent on Field and ITR